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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,519	02/04/2005	Takako Araki	050066	1371

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EXAMINER

NGUYEN, LINH THI

ART UNIT PAPER NUMBER

2627

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/523,519	<b>Applicant(s)</b> ARAKI, TAKAKO	
	<b>Examiner</b> Linh T. Nguyen	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (AAPA) in view of Tsutsui et al (US Patent Number 5808983).

In regards to claim 1, applicant's admitted prior art discloses a disk playback device comprising a calculation processing circuit for determining an optimum value of offset for an error signal based on an amplitude value of the error signal in accordance with focus deviation or tracking deviation of an optical head or an amplitude value of an output signal of the optical head, and making an offset adjustment based on the optimum offset value (Paragraph [0004]), the calculation processing circuit approximating to a quadratic curve the relationship between offset values and the amplitude values in signal reproduction (Fig. 19), and repeating calculation of the optimum offset values based on the quadratic curve, and comprising: calculation processing means for approximating to a quadratic curve the relationship between the offset values and the amplitude values with reference to three different offset values and three amplitude values at the respective offset values (Paragraph [0005], lines 16-17), and calculating an offset value corresponding to the peak of the quadratic curve as the

optimum offset value (Fig. 19, Popt1= optimum offset), and value setting means for setting the three different offset values (Fig. 19, P0, P1, and P4): a first offset value (Fig. 19, P0); a second offset value (Fig. 19, P1) smaller than the first offset value (P0) and having an amplitude value smaller (Fig. 19, T1) than an amplitude value at the first offset (Fig. 19, T0) value by a predetermined value (T0) or more; a third offset value (Fig. 19, P4) greater than the first offset value (P0) and having an amplitude value (T4) smaller than an amplitude value at the first offset (T1) value by a predetermined value (T0) or more, and setting the three amplitude values respectively at three amplitude values at the first to third offset values (Fig. 19), the value setting means setting the first offset value at an optimum offset value obtained in a previous optimum offset value calculation processing, and setting the second and third offset values respectively at second and third offset values set in a previous optimum offset value calculation processing (Paragraph [0005], lines 16-22). However, AAPA does not disclose a measurement of three amplitude values and three different offset values to determine the optimum offset value.

In the same field of endeavor, Tsutsui et al discloses disk playback device comprising a calculation of optimum offset value by measuring three amplitude values of three offset values (Fig. 5 and Column 9, lines 46-51). At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the calculation of optimum offset value of AAPA to three samples of amplitude and offset values as suggested by Tsutsui et al. The motivation for doing so would have been to accurately find the optimum offset value.

In regards to claim 2, applicant's admitted prior art discloses a disk playback device according to claim 1, wherein the calculation processing circuit comprises: first checking means for checking whether an amplitude value at the previous second offset value is smaller than an amplitude value at the previous optimum offset value by a predetermined value or more, second checking means for checking whether an amplitude value at the previous third offset value is smaller than an amplitude value at the previous optimum offset value by a predetermined value or more (Paragraph [0007], lines 1-6 ), the value setting means comprising: second offset value setting means for retrieving an offset value having an amplitude value smaller than the amplitude value at the previous optimum offset value by a predetermined value or more (Fig. 13, S95; Px which is P0-P4 is less than Pmax) when the amplitude value at the previous second offset value is not found to be smaller than the amplitude value at the previous optimum offset value by a predetermined value or more, and setting a second offset value at the retrieved offset value (Fig. 13, E; tries to set the P back to less than the initial from step S100-S101), and third offset value setting means for retrieving an offset value having an amplitude value smaller than the amplitude value at the previous optimum offset value by a predetermined value or more when the amplitude value at the previous third offset value is not found to be smaller than the amplitude value at the previous optimum offset value by a predetermined value or more, and setting a third offset value at the retrieved offset value (Fig. 13 and 14, same steps follow as above).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Tsutsui et al as applied to claim 1 above, and further in view of Asano et al (US Publication Number 200400227947).

In regards to claim 3, applicant's admitted prior art discloses a disk playback device according to claim 1 or claim 2 above.

Applicant's admitted prior art does not but Asano et al discloses a disk playback device, wherein the disk playback device comprises temperature detection means for detecting a temperature of the disk, and the calculation processing circuit calculates the optimum offset value every time the disk is varied in temperature by a predetermined temperature value (Paragraph [0025] and [0026]). At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the disk playback device of AAPA and Tsutsui et al to detect variation in temperature as taught by Asano et al. The motivation for doing so would have been so that signals can be reproduced with higher accuracy by correcting the optimum offset value in relationship with the temperature.

### ***Response to Arguments***

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh T. Nguyen whose telephone number is 571-272-5513. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LN  
November 7, 2006

  
THANG V. TRAN  
PRIMARY EXAMINER